



## ZyWALL 1100/310/110 and USG20(W)-VPN VPN Firewall

Networking brings convenience and efficiency to business environments; however it introduces significant security and safety concerns at the same time. Today, businesses or branch offices really need a complete yet affordable solution that not only bridges communications between two or more remote sites, but also connects multiple VPNs and ensures data security to prevent the network from threats.

### Benefits

#### Safer, more reliable VPN connections

Faster processors today have vastly boosted the capabilities of attackers to decrypt VPN tunnels. Legacy VPN cryptographic algorithms like Message Digest 5 (MD5) and Secure Hash Algorithm 1 (SHA-1) are no longer sufficient to guarantee secure outbound communications. With supports to the more advanced Secure Hash Algorithm 2 (SHA-2), the VPN Firewall provides the safest VPN connections in its class to ensure maximum security for business communications.

The complete range of ZyXel VPN Firewalls deliver reliable, non-stop VPN services with dual-WAN failover and fallback support. With two WAN connections—one primary and one for redundancy—the ZyXel VPN Firewall automatically switches to the backup connection should the primary link fail, and automatically switches back to the primary connection once it is back online.



Robust hybrid VPN (IPSec/SSL/L2TP over IPSec)



High-performance SPI Firewall



More secure VPN connections with SHA-2 cryptographic



Auto-provisioned client-to-site IPsec setup with Easy VPN



Cloud helper provides the friendly firmware upgrade to ensure its authenticity and reliability.



Device HA Pro dedicated heartbeat port ensures smart handover.



Hotspot management for authentication, access control and billing.



To support dynamic, mobile business operations in today's BYOD (bring your own device) business environments, the VPN Firewalls offer unlimited business mobility with Layer-2 Tunneling Protocol (L2TP) VPN for mobile devices. The VPN Firewall supports L2TP/IPSec VPN on a wide variety of mobile Internet devices running the iOS, Android and Windows mobile platforms.

### **Zero-configuration remote access**

Virtual private networks provide businesses a secure and convenient way of sharing company resources with partners, customers, or employees on business trips. Yet typical VPN solutions are hard for non-technical users to configure, which greatly reduces their usability and convenience. The Zyxel VPN Firewalls feature Easy VPN to provide auto-provisioned client-to-site IPsec VPN setup. A wizard is available with the Zyxel IPsec VPN client-software that automatically retrieves the VPN configuration file from the remote Zyxel VPN Firewall and completes the IPsec VPN setup in 3 simple steps. Zyxel's Easy VPN lowers administration effort and allows partner, customers, or traveling employees to access company servers, email, or data centers easily and securely.

### **Best TCO for access expansion**

People expect network access regardless of time or location. As a result, hotspots are in demand in an ever-expanding assortment of locations. The Zyxel VPN firewalls integrated with Zyxel AP Controller technology enables users from a centralized user interface. In addition, Zyxel Hotspot Management delivers a unified solution for business networks with user-friendly tools like Billing System, Walled Garden, Multiple Authentication, 3rd Party Social Login and User Agreement. With ZyWALL series businesses can now deploy or expand a managed Wi-Fi network with minimal effort.

### **Swift and secure firmware upgrades**

Locating firmware updates — not to mention identifying correct versions for your device and managing their installation — can be a complex and confusing ordeal. The Zyxel VPN Firewall solves this with its new Cloud Helper service. Cloud Helper provides a simple step to look for up-to-date firmware information. New firmware is immediately made available upon release from our official database to ensure its authenticity and reliability.

### **Simplified management procedure**

Managing complex configuration settings can be confusing and time-consuming. Zyxel USG 20-VPN and USG20W-VPN provides an "easy mode" setting in the GUI for entry-level and SOHO users. Easy mode provides an icon-based feature set and attractive dashboard to simplify management and monitoring of the device. Application and function settings also have integrated wizards for user-friendly setup. Zyxel USG 20-VPN and USG20W-VPN easy mode helps entry-level users and SOHO users effortlessly take advantage of high-speed and secure networking.

### **Zyxel One Network experience**

Aiming for relieving our customers from repetitive operations of deploying and managing a network, Zyxel One Network is designed to simplify the configuration, management, and troubleshooting, allowing our customers to focus on the business priorities. Zyxel One Network presents an easy-to-use tool, Zyxel One Network Utility (ZON Utility), to realize speed network setup. Zyxel Smart Connect allows Zyxel networking equipment to be aware and recognize each other and further facilitating the network maintenance via one-click remote functions such as factory reset or power cycling. Zyxel One Network redefines the network integration across multiple networking products from switch to Wi-Fi AP and to Gateway.

### **Stay secure and Up-to-Date with OneSecurity**

Zyxel provides frequent and timely updates in response to the latest security threats and advisories through OneSecurity — our free online service portal. OneSecurity offers informative network security resources and the know-how to assist businesses and IT administrators in keeping their network operations safe in the digital age. Information and resources can be found with one click via the GUI of Zyxel USG Extreme and ZyWALL series products. IT staff can quickly and easily catch up on the latest threats, and then proceed to walkthroughs and troubleshooting protocols with the help of easy-to-follow FAQs — all provided to help users secure their networks and simplify management of our UTM products.

## VPN Firewall Quick Finder

|                                      |  |  |  |  |  |
|--------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                      |                                                                                   | ZyWALL 110                                                                        | ZyWALL 310                                                                         | ZyWALL 1100                                                                         | USG2200-VPN                                                                         |
| Model                                | USG20(W)-VPN                                                                      |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| Description                          | SBs                                                                               |                                                                                   | SMBs                                                                               |                                                                                     | MBs                                                                                 |
| Multi-WAN                            | Yes                                                                               | Yes                                                                               | Yes                                                                                | Yes                                                                                 | Yes                                                                                 |
| Unified security policy              | Yes                                                                               | Yes                                                                               | Yes                                                                                | Yes                                                                                 | Yes                                                                                 |
| SSL inspection                       | -                                                                                 | Yes                                                                               | Yes                                                                                | Yes                                                                                 | Yes                                                                                 |
| Link Aggregation (LAG) <sup>*1</sup> | -                                                                                 | -                                                                                 | Yes                                                                                | Yes                                                                                 | Yes                                                                                 |
| Port grouping                        | Yes                                                                               | Yes                                                                               | -                                                                                  | -                                                                                   | -                                                                                   |
| Device HA                            | -                                                                                 | Yes                                                                               | Yes                                                                                | Yes                                                                                 | Yes                                                                                 |
| Device HA Pro                        | -                                                                                 | Yes                                                                               | Yes                                                                                | Yes                                                                                 | Yes                                                                                 |
| Easy Mode                            | Yes                                                                               | -                                                                                 | -                                                                                  | -                                                                                   | -                                                                                   |
| Cloud Helper                         | Yes                                                                               | Yes                                                                               | Yes                                                                                | Yes                                                                                 | Yes                                                                                 |
| PCI DSS Compliance                   | Yes                                                                               | Yes                                                                               | Yes                                                                                | Yes                                                                                 | Yes                                                                                 |
| Content Filtering 2.0 <sup>*2</sup>  | Yes                                                                               | Yes                                                                               | Yes                                                                                | Yes                                                                                 | Yes                                                                                 |
| Hotspot Management <sup>*3</sup>     | -                                                                                 | Yes                                                                               | Yes                                                                                | Yes                                                                                 | Yes                                                                                 |

\*1: Link Aggregation of USG2200-VPN is available with upgradable firmware.

\*2: SSL Inspection must be enabled for Content Filtering 2.0 Safe Search to function properly.

\*3: Hotspot Management supports for ZyWALL 310 and ZyWALL 1100 in firmware ZLD4.20 or later; and for ZyWALL 110 in firmware ZLD4.25 or later.

## Key Services



The Zyxel VPN Firewall Series provides a complete feature set to perfectly fit different business requirements as well as to enable the maximum performance and security with an all-in-one appliance. Comprehensive network modularity also empowers IT professionals to customize the system to meet their individual needs.

Notes:

1. USG20(W)-VPN provides Anti-Spam & Content Filtering 2.0 only

2. Hotspot Management supports for ZyWALL 310 and ZyWALL 1100 in firmware ZLD4.20 or later; and for ZyWALL 110 in firmware ZLD4.25 or later.

# Key Applications

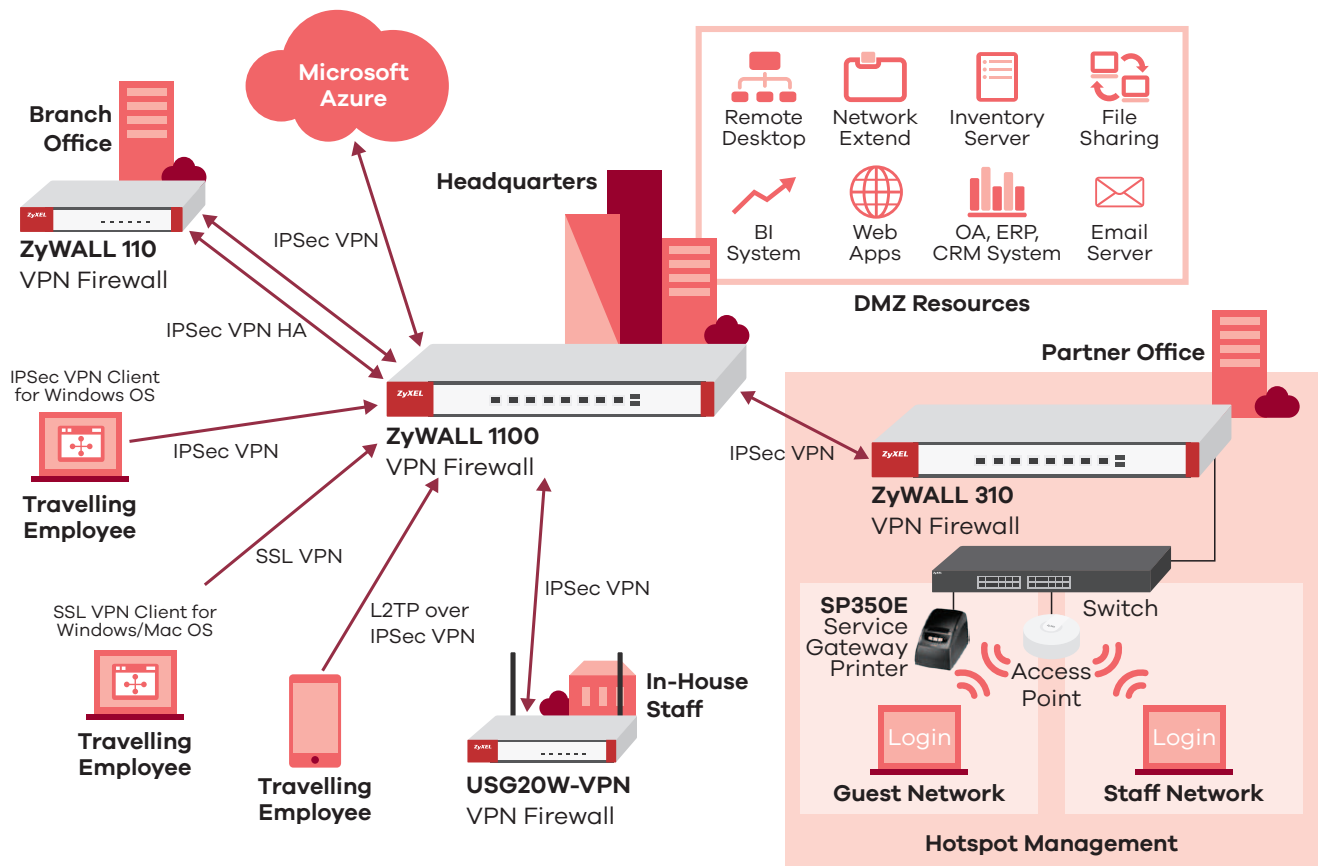
## VPN application

- Branch offices, partners and home users can deploy Zyxel USGs/ZyWALLs for site-to-site IPsec VPN connections
- Branch offices/In-house staff can additionally deploy IPsec VPN HA (load balancing and failover) for always online VPN connectivity
- Remote users can securely access company resources with their computers or smartphones via SSL, IPsec and L2TP over IPsec VPN
- The headquarter USG/ZyWALL can also establish an IPsec VPN connection with Microsoft Azure for secured access to a variety of cloud-based applications

## Hotspot Management

- High speed internet access
- Tier of service
- Log record for regulatory compliance
- Premium security control
- Various Network access control ( free or paid access, social login)

\*Hotspot Management supports for ZyWALL 310 and ZyWALL 1100 in firmware ZLD4.20 or later; and for ZyWALL 110 in firmware ZLD4.25 or later.



## Specifications

| Model                                                         | ZyWALL 1100                                                                        | ZyWALL 310                        | ZyWALL 110                        | USG20-VPN                         | USG20W-VPN                        |
|---------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Product photo                                                 |  |                                   |                                   |                                   |                                   |
| Hardware Specifications                                       |                                                                                    |                                   |                                   |                                   |                                   |
| 10/100/1000 Mbps RJ-45 ports                                  | 8 (configurable)                                                                   | 8 (configurable)                  | 2 x WAN, 1 x OPT, 4 x LAN/DMZ     | 1 x WAN, 1 x SFP, 4 x LAN/DMZ     | 1 x WAN, 1 x SFP, 4 x LAN/DMZ     |
| USB ports                                                     | 2                                                                                  | 2                                 | 2                                 | 1                                 | 1                                 |
| Console port                                                  | Yes (DB9)                                                                          | Yes (DB9)                         | Yes (DB9)                         | Yes (RJ-45)                       | Yes (RJ-45)                       |
| Rack-mountable                                                | Yes                                                                                | Yes                               | Yes                               | -                                 | -                                 |
| Fanless                                                       | -                                                                                  | -                                 | -                                 | Yes                               | Yes                               |
| System Capacity & Performance <sup>*1</sup>                   |                                                                                    |                                   |                                   |                                   |                                   |
| SPI firewall throughput (Mbps) <sup>*2</sup>                  | 6,000                                                                              | 5,000                             | 1,600                             | 350                               | 350                               |
| VPN throughput (Mbps) <sup>*3</sup>                           | 800                                                                                | 650                               | 400                               | 90                                | 90                                |
| Concurrent Devices (default/max.) <sup>*4</sup>               | 800/1500                                                                           | 500/ 800                          | 200/ 300                          | 64                                | 64                                |
| Max. TCP concurrent sessions <sup>*5</sup>                    | 1,000,000                                                                          | 500,000                           | 150,000                           | 20,000                            | 20,000                            |
| Max. concurrent IPsec VPN tunnels <sup>*6</sup>               | 1,000                                                                              | 300                               | 100                               | 10                                | 10                                |
| Concurrent SSL VPN user no. (default/max.) <sup>*7</sup>      | 250/500                                                                            | 50/150                            | 25/150                            | 5/15                              | 5/15                              |
| Customizable zones                                            | Yes                                                                                | Yes                               | Yes                               | Yes                               | Yes                               |
| IPv6 support                                                  | Yes                                                                                | Yes                               | Yes                               | Yes                               | Yes                               |
| VLAN interface                                                | 128                                                                                | 64                                | 16                                | 8                                 | 8                                 |
| WLAN Management                                               |                                                                                    |                                   |                                   |                                   |                                   |
| AP controller (APC) Support                                   | Yes                                                                                | Yes                               | Yes                               | -                                 | -                                 |
| Managed AP number (default/max.) <sup>*8</sup>                | 2/66                                                                               | 2/34                              | 2/34                              | -                                 | -                                 |
| Key Software Features                                         |                                                                                    |                                   |                                   |                                   |                                   |
| Firewall                                                      | Yes                                                                                | Yes                               | Yes                               | Yes                               | Yes                               |
| Virtual private network (VPN)                                 | Yes (IPSec, SSL, L2TP over IPSec)                                                  | Yes (IPSec, SSL, L2TP over IPSec) | Yes (IPSec, SSL, L2TP over IPSec) | Yes (IPSec, SSL, L2TP over IPSec) | Yes (IPSec, SSL, L2TP over IPSec) |
| Bandwidth Management                                          | Yes                                                                                | Yes                               | Yes                               | Yes                               | Yes                               |
| Logging and Monitoring                                        | Yes                                                                                | Yes                               | Yes                               | Yes                               | Yes                               |
| SSL (HTTPS) inspection                                        | Yes                                                                                | Yes                               | Yes                               | -                                 | -                                 |
| Unified Security Policy                                       | Yes                                                                                | Yes                               | Yes                               | Yes                               | Yes                               |
| EZ Mode                                                       | -                                                                                  | -                                 | -                                 | Yes                               | Yes                               |
| Cloud Helper                                                  | Yes                                                                                | Yes                               | Yes                               | Yes                               | Yes                               |
| Device HA                                                     | Yes                                                                                | Yes                               | Yes                               | -                                 | -                                 |
| Licenses Features (E-iCard required)                          |                                                                                    |                                   |                                   |                                   |                                   |
| Anti-Virus (AV)                                               | Yes                                                                                | Yes                               | Yes                               | -                                 | -                                 |
| Intrusion detection and prevention (IDP) & Application Patrol | Yes                                                                                | Yes                               | Yes                               | -                                 | -                                 |
| Anti-Spam                                                     | Yes                                                                                | Yes                               | Yes                               | Yes                               | Yes                               |
| Content Filtering (CF2.0) <sup>*9</sup>                       | Yes                                                                                | Yes                               | Yes                               | Yes                               | Yes                               |
| Device HA Pro                                                 | Yes                                                                                | Yes                               | Yes                               | -                                 | -                                 |
| Hotspot Management <sup>*10</sup>                             | Yes                                                                                | Yes                               | Yes                               | -                                 | -                                 |

| Model                         |                            | ZyWALL 1100                                                                                 | ZyWALL 310                                                                                  | ZyWALL 110                                                                                                           | USG20-VPN                                                                                                             | USG20W-VPN                                                                                                                               |
|-------------------------------|----------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Power Requirements            |                            |                                                                                             |                                                                                             |                                                                                                                      |                                                                                                                       |                                                                                                                                          |
| Power input                   |                            | 100 – 240 V AC, 50/60 Hz, 1.3 A max.                                                        | 100 – 240 V AC, 50/60 Hz, 1.3 A max.                                                        | 12 V DC, 3.33 A max.                                                                                                 | 12 V DC, 2.0 A max.                                                                                                   | 12 V DC, 2.0 A max.                                                                                                                      |
| Max. power consumption (watt) |                            | 58.5                                                                                        | 58.5                                                                                        | 37.0                                                                                                                 | 12.00                                                                                                                 | 18.0                                                                                                                                     |
| Heat dissipation (BTU/hr)     |                            | 199.61                                                                                      | 199.61                                                                                      | 126.25                                                                                                               | 40.92                                                                                                                 | 61.38                                                                                                                                    |
| Physical Specifications       |                            |                                                                                             |                                                                                             |                                                                                                                      |                                                                                                                       |                                                                                                                                          |
| Item                          | Dimensions (WxDxH)(mm/in.) | 430 x 250 x 44/<br>16.93 x 9.84 x 1.73                                                      | 430 x 250 x 44/<br>16.93 x 9.84 x 1.73                                                      | 300 x 178 x 44/<br>11.81 x 7 x 1.73                                                                                  | 216 x 143 x 33/<br>8.50 x 5.63 x 1.30                                                                                 | 216 x 143 x 33/<br>8.50 x 5.63 x 1.30                                                                                                    |
|                               | Weight (kg/lb.)            | 3.3/7.28                                                                                    | 3.3/7.28                                                                                    | 2/4.41                                                                                                               | 1.04/2.29                                                                                                             | 1.14/2.51<br>(antenna included)                                                                                                          |
| Packing                       | Dimensions (WxDxH)(mm/in.) | 519 x 392 x 163/<br>20.43 x 15.43 x 6.42                                                    | 519 x 392 x 163/<br>20.43 x 15.43 x 6.42                                                    | 245 x 152 x 351/<br>9.65 x 5.98 x 13.82                                                                              | 276 x 185 x 98/<br>10.87 x 7.28 x 3.86                                                                                | 276 x 185 x 98/<br>10.87 x 7.28 x 3.86                                                                                                   |
|                               | Weight (kg/lb.)            | 4.74/10.45                                                                                  | 4.74/10.45                                                                                  | 2.83/6.24                                                                                                            | 1.41/3.11                                                                                                             | 1.50/3.31                                                                                                                                |
| Included accessories          |                            | <ul style="list-style-type: none"> <li>• Power cord</li> <li>• Rack mounting kit</li> </ul> | <ul style="list-style-type: none"> <li>• Power cord</li> <li>• Rack mounting kit</li> </ul> | <ul style="list-style-type: none"> <li>• Power adaptor</li> <li>• Power cord</li> <li>• Rack mounting kit</li> </ul> | <ul style="list-style-type: none"> <li>• Power adapter</li> <li>• RJ45 -RS232 cable for console connection</li> </ul> | <ul style="list-style-type: none"> <li>• Power adapter</li> <li>• RJ45 -RS232 cable for console connection</li> <li>• Antenna</li> </ul> |
| Environmental Specifications  |                            |                                                                                             |                                                                                             |                                                                                                                      |                                                                                                                       |                                                                                                                                          |
| Operating                     | Temperature                | 0°C to 40°C/<br>32°F to 104°F                                                               | 0°C to 40°C/<br>32°F to 104°F                                                               | 0°C to 40°C/<br>32°F to 104°F                                                                                        | 0°C to 40°C/<br>32°F to 104°F                                                                                         | 0°C to 40°C/<br>32°F to 104°F                                                                                                            |
|                               | Humidify                   | 10% to 90%<br>(non-condensing)                                                              | 10% to 90%<br>(non-condensing)                                                              | 10% to 90%<br>(non-condensing)                                                                                       | 10% to 90%<br>(non-condensing)                                                                                        | 10% to 90%<br>(non-condensing)                                                                                                           |
| Storage                       | Temperature                | -30°C to 70°C/<br>-22°F to 158°F                                                            | -30°C to 70°C/<br>-22°F to 158°F                                                            | -30°C to 70°C/<br>-22°F to 158°F                                                                                     | -30°C to 70°C/<br>-22°F to 158°F                                                                                      | -30°C to 70°C/<br>-22°F to 158°F                                                                                                         |
|                               | Humidify                   | 10% to 90%<br>(non-condensing)                                                              | 10% to 90%<br>(non-condensing)                                                              | 10% to 90%<br>(non-condensing)                                                                                       | 10% to 90%<br>(non-condensing)                                                                                        | 10% to 90%<br>(non-condensing)                                                                                                           |
| MTBF (hr)                     |                            | 560,811.5                                                                                   | 560,811.5                                                                                   | 787,109.3                                                                                                            | 44,000.00                                                                                                             | 44,000.00                                                                                                                                |
| Certifications                |                            |                                                                                             |                                                                                             |                                                                                                                      |                                                                                                                       |                                                                                                                                          |
| EMC                           |                            | FCC Part 15 (Class A), CE EMC(Class A), C-Tick (Class A), BSMI                              | FCC Part 15 (Class A), CE EMC(Class A), C-Tick (Class A), BSMI                              | FCC Part 15 (Class A), CE EMC(Class A), C-Tick (Class A), BSMI                                                       | FCC Part 15 (Class B), IC, CE EMC(Class B), RCM, BSMI                                                                 | FCC Part 15 (Class B), IC, CE EMC(Class B), RCM, BSMI                                                                                    |
| Safety                        |                            | LVD (EN60950-1), BSMI                                                                       | LVD (EN60950-1), BSMI                                                                       | LVD (EN60950-1), BSMI                                                                                                | BSMI, UL                                                                                                              | BSMI, UL                                                                                                                                 |

Note:

\* This matrix with firmware ZLD 4.20 or later.

\*1: Actual performance may vary depending on network conditions and activated applications.

\*2: Maximum throughput based on RFC 2544 (1,518-byte UDP packets).

\*3: VPN throughput measured based on RFC 2544 (1,424-byte UDP packets).

\*4: With Zyxel Device Upgrade License, this is the recommend maximum number of concurrent logged-in devices.

\*5: Maximum sessions measured while UTM disabled using the industry standard IXIA 1xLoad testing tool.

\*6: Including Gateway-to-Gateway and Client-to-Gateway.

\*7: With Zyxel SSL VPN License, this is the recommend maximum number of concurrent VPN users.

\*8: With Zyxel AP Controller License, this is the recommend maximum AP capacity of concurrent users.

\*9: SafeSearch function in CF2.0 need to enable SSL Inspection firstly and not for small business models.

\*10: Hotspot Management supports for ZyWALL 310 and ZyWALL 1100 in firmware ZLD4.20 or later; and for ZyWALL 110 in firmware ZLD4.25 or later.

## Wireless Specifications

| Model                  |                 | USG20W-VPN                                                                                                                      |
|------------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------|
| Standard compliance    |                 | 802.11 a/b/g/n/ac                                                                                                               |
| Wireless frequency     |                 | 2.4 GHz / 5 GHz                                                                                                                 |
| Radio                  |                 | 1                                                                                                                               |
| SSID number            |                 | 8                                                                                                                               |
| Maximum transmit power | US (FCC)        | 25dBm, 3 antennas                                                                                                               |
|                        | 2.4 GHz         |                                                                                                                                 |
|                        | US (FCC) 5 GHz  | 25dBm, 3 antennas                                                                                                               |
|                        | EU (ETSI)       | 20dBm (EIRP), 3antennas                                                                                                         |
|                        | 2.4 GHz         |                                                                                                                                 |
|                        | EU (ETSI) 5 GHz | 20dBm (EIRP), 3antennas                                                                                                         |
| No. of antenna         |                 | 3 Detachable antenna                                                                                                            |
| Antenna gain           |                 | 2dBi @2.4GHz, 3dBi @5GHz                                                                                                        |
| Data rate              |                 | 802.11n Up to 450Mbps, 802.11ac Up to 1300Mbps                                                                                  |
| Receive sensitivity    | 2.4 GHz         | 11 Mbps ≤ -87 dBm, 54 Mbps ≤ -74 dBm, HT20, MCS15 ≤ -71 dBm HT40, MCS15 ≤ -67 dBm                                               |
|                        | 5 GHz           | 54 Mbps ≤ -74 dBm HT20, MCS23 ≤ -71 dBm HT40, MCS23 ≤ -68 dBm VHT20, MCS8 ≤ -66 dBm VHT40, MCS9 ≤ -62 dBm VHT80, MCS9 ≤ -59 dBm |

## Features Set

### Software Features

#### Firewall

- ICSA-certified firewall
- Routing and transparent (bridge) modes
- Stateful packet inspection
- User-aware policy enforcement
- SIP/H.323 NAT traversal
- ALG support for customized ports
- Protocol anomaly detection and protection
- Traffic anomaly detection and protection
- Flooding detection and protection
- DoS/DDoS protection

#### IPv6 Support

- Dual stack
- IPv4 tunneling (6rd and 6to4 transition tunnel)
- IPv6 addressing
- DNS
- DHCPv6
- Bridge
- VLAN
- PPPoE
- Static routing
- Policy routing
- Session control
- Firewall and ADP
- IPSec VPN
- IDP

- Application Patrol
- Content Filtering 2.0
- Anti-Virus, Anti-Malware
- Anti-Spam

#### IPSec VPN

- Encryption: AES (256-bit), 3DES and DES
- Authentication: SHA-2 (512-bit), SHA-1 and MD5
- Support route-based VPN Tunnel Interface (VTI)
- Key management: manual key, IKEv1 and IKEv2 with EAP
- Perfect forward secrecy (DH groups) support 1, 2, 5, 14
- IPSec NAT traversal
- Dead peer detection and relay detection
- PKI (X.509) certificate support
- VPN concentrator
- Simple wizard support
- VPN auto-reconnection
- VPN High Availability (HA): load-balancing and failover
- L2TP over IPSec
- GRE and GRE over IPSec
- NAT over IPSec
- Zyxel VPN client provisioning

#### SSL VPN

- Supports Windows and Mac OS X
- Supports full tunnel mode
- Supports 2-step authentication
- HTTP, FTP, SMTP, POP3 and IMAP4 protocol support
- Automatic signature updates
- No file size limitation
- Customizable user portal

#### Networking

- Routing mode, bridge mode and hybrid mode
- Ethernet and PPPoE
- NAT and PAT
- VLAN tagging (802.1Q)
- Virtual interface (alias interface)
- Policy-based routing (user-aware)
- Policy-based NAT (SNAT)
- Dynamic routing (RIPv1/v2 and OSPF)
- DHCP client/server/relay
- Dynamic DNS support
- WAN trunk for more than 2 ports
- Per host session limit
- Guaranteed bandwidth
- Maximum bandwidth
- Priority-bandwidth utilization
- Bandwidth limit per user
- Bandwidth limit per IP
- GRE

## **WLAN Management**

### **(ZyWALL Series support only)**

- Support AP controller version 1.97
- Wireless L2 isolation
- Supports auto AP FW update
- Scheduled Wi-Fi service
- Dynamic Channel Selection (DCS)
- Client steering for 5GHz priority and sticky client prevention
- Auto healing provides a stable and reliable coverage
- IEEE 802.1x authentication
- Captive portal Web authentication
- Customizable captive portal page
- RADIUS authentication
- Wi-Fi Multimedia (WMM) wireless QoS
- CAPWAP discovery protocol
- Multiple SSID with VLAN

### **Authentication**

- Local user database
- Built-in user database
- Microsoft Windows Active Directory integration
- External LDAP/RADIUS user database
- XAUTH, IKEv2 with EAP VPN authentication
- Web-based authentication
- Forced user authentication (transparent authentication)
- IP-MAC address binding
- SSO (Single Sign-On) support

### **Logging/Monitoring**

- Comprehensive local logging
- Syslog (send to up to 4 servers)
- E-mail alert (send to up to 2 servers)
- Real-Time traffic monitoring

- System status monitoring
- Built-in daily report
- Advanced reporting (Vantage Report)

### **System Management**

- Role-based administration
- Multiple administrator logins
- Supports Cloud Helper
- Multi-lingual Web GUI (HTTPS and HTTP)
- Command line interface (console, Web console, SSH and telnet)
- SNMP v1, v2c, v3
- System configuration rollback
- Firmware upgrade via FTP, FTP-TLS and Web GUI
- Dual firmware images
- Cloud CNM SecuManager

### **Optional Security Services**

- Kaspersky Anti-Virus
- Application Patrol & IDP
- Content Filtering 2.0
- Anti-Spam

### **Zyxel One Network**

- ZON Utility
  - IP configuration
  - Web GUI access
  - Firmware upgrade
  - Password configuration
- Smart Connect
  - Location and System Name update
  - Discover neighboring devices
  - One-click remote management access to the neighboring Zyxel devices

## **Hotspot Management**

- ZyWALL 110\*, ZyWALL 310, and ZyWALL 1100 support only

\* Firmware ZLD4.25 or later

- Integrated account generator, Web-based authentication portal and billing system
- Supports external RADIUS servers
- Per account bandwidth management
- User agreement login
- SP350E Service Gateway Printer enables oneclick account and billing generation
- Built-in billing system
  - Time-to-finish accounting mode
  - Accumulation accounting mode
- Supports PayPal online payment
- Marketing tool
  - Advertisement link
  - Walled garden
  - Portal page

### **Device High Availability Pro (HA Pro)**

- ZyWALL Series support only
- Device failure detection and notification
- Supports ICMP and TCP ping check
- Link monitoring
- Configuration auto-sync
- Dedicated Heartbeat Link
- Smart handover
- NAT/Firewall/VPN Sessions synchronization

## Services

### VPN

| Product                                                      | SSL VPN Tunnels     | SSL VPN Client <sup>*1</sup> | IPSec VPN Client        |
|--------------------------------------------------------------|---------------------|------------------------------|-------------------------|
| <b>ZyWALL 1100</b><br><b>ZyWALL 310</b><br><b>ZyWALL 110</b> | Add 5/10/50 tunnels | For 1/5/10 client(s)         | For 1/5/10/50 client(s) |
| <b>USG20-VPN</b><br><b>USG20W-VPN</b>                        | Add 5/10 tunnels    | For 1/5/10 client(s)         | For 1/5/10/50 client(s) |

\*1: Support OS: MAC OS 10.7 or later

### Security

| Product                                                      | Kaspersky Anti-Virus | Application Patrol & IDP | Content Filtering 2.0 | Anti-Spam   |
|--------------------------------------------------------------|----------------------|--------------------------|-----------------------|-------------|
| <b>ZyWALL 1100</b><br><b>ZyWALL 310</b><br><b>ZyWALL 110</b> | 1/2 year(s)          | 1/2 year(s)              | 1/2 year(s)           | 1/2 year(s) |
| <b>USG20-VPN</b><br><b>USG20W-VPN</b>                        | -                    | -                        | 1/2 year(s)           | 1/2 year(s) |

Notes:

1. Licenses can be easily activated, renewed and managed at myZyxel.
2. License bundles may vary according to region. Please contact your local sales representative for more information.
3. ZyWALL Series provides all security services with 30-day trial.
4. USG20(W)-VPN provide Content Filtering 2.0 and Anti-Spam services with 30-day trial.

### Connectivity & Industrial Solution

| Product            | Concurrent Device Upgrade <sup>*1</sup> | Hotspot Management <sup>*2</sup> | Managed APs | Device HA Pro <sup>*1</sup> | Vantage Report           |
|--------------------|-----------------------------------------|----------------------------------|-------------|-----------------------------|--------------------------|
| <b>ZyWALL 1100</b> | 100/300 nodes                           | 1 year/One-Time                  | Add 4/8 APs | One-Time                    | For 1/5/25/100 device(s) |
| <b>ZyWALL 310</b>  | 100/300 nodes                           | 1 year/One-Time                  | Add 4/8 APs | One-Time                    | For 1/5/25/100 device(s) |
| <b>ZyWALL 110</b>  | 100 nodes                               | 1 year / One-Time                | Add 4/8 APs | One-Time                    | For 1/5/25/100 device(s) |
| <b>USG20-VPN</b>   | -                                       | -                                | -           | -                           | For 1/5/25/100 device(s) |
| <b>USG20W-VPN</b>  | -                                       | -                                | -           | -                           | For 1/5/25/100 device(s) |

\*1: With firmware ZLD 4.20 or later

\*2: Hotspot Management supports for ZyWALL 310 and ZyWALL 1100 in firmware ZLD4.20 or later; and for ZyWALL 110 in firmware ZLD4.25 or later.

## Access Point Compatibility List

| Series                    | NWA5120 Series                                                    | NWA5000 Series                     | NWA3000-N Series                    | WAC6500 Series                                                     |
|---------------------------|-------------------------------------------------------------------|------------------------------------|-------------------------------------|--------------------------------------------------------------------|
|                           | Unified Access Point                                              | Managed Access Point               | Unified Pro Access Point            | Unified Pro Access Point                                           |
| <b>Models</b>             | NWA5121-NI<br>NWA5121-N<br>NWA5123-NI<br>NWA5301-NJ<br>NWA5123-AC | NWA5160N<br>NWA5560-N<br>NWA5550-N | NWA3160-N<br>NWA3560-N<br>NWA3550-N | WAC6503D-S<br>WAC6502D-S<br>WAC6502D-E<br>WAC6553D-E<br>WAC6103D-I |
| <b>Functions</b>          |                                                                   |                                    |                                     |                                                                    |
| <b>Central management</b> | Yes                                                               | Yes                                | Yes                                 | Yes                                                                |
| <b>Auto provisioning</b>  | Yes                                                               | Yes                                | Yes                                 | Yes                                                                |
| <b>Data forwarding</b>    | Local bridge                                                      | Local bridge                       | Local bridge                        | Local bridge                                                       |

## Accessories

### SecuExtender Software

| Item                    | Description                                                                                                | Supported OS                                                                                                                                                                                                                                                                                        |
|-------------------------|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>IPSec VPN Client</b> | IPSec VPN client software for the ZyWALL and USG Series with Easy VPN for zero-configuration remote access | <ul style="list-style-type: none"> <li>• Windows XP (32-bit)</li> <li>• Windows Server 2003 (32-bit)</li> <li>• Windows Server 2008 (32/64-bit)</li> <li>• Windows Vista (32/64-bit)</li> <li>• Windows 7 (32/64-bit)</li> <li>• Windows 8 (32/64-bit)</li> <li>• Windows 10 (32/64-bit)</li> </ul> |
| <b>SSL VPN Client</b>   | Secured VPN connection between device and USG/ZyWALL Series with lite setup for Windows and MAC OS         | <ul style="list-style-type: none"> <li>• Windows XP</li> <li>• Windows 7 (32/64-bit)</li> <li>• Windows 8/8.1 (32/64-bit)</li> <li>• Windows 10 (32/64-bit)</li> <li>• MAC OS 10.7 or later</li> </ul>                                                                                              |

Notes:

1. A 30-day trial version of IPSec VPN client and SSL VPN client for MAC OS can be downloaded from official Zyxel website. To continue using the application, please contact your regional sales representatives and purchase a commercial license for the application.
2. SSL VPN client for Windows OS can be downloaded from official Zyxel website. It does not require a license key to activate the application.

### Service Gateway Printer

| Model         | Feature                                                                                                                                                                                                                                                                                                                   | Supported model                        |
|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <b>SP350E</b> | <ul style="list-style-type: none"> <li>• Buttons: 3</li> <li>• Paper roll width: 58 (+0/-1) mm</li> <li>• Interface: 10/100 Mbps RJ-45 port</li> <li>• Power input: 12 V DC, 5 A max.</li> <li>• Item dimensions (WxDxH): 176 x 111 x 114 mm (6.93" x 4.37" x 4.49")</li> <li>• Item weight: 0.8 kg (1.76 lb.)</li> </ul> | ZyWALL1100<br>ZyWALL310<br>ZyWALL 110* |



\* With firmware ZLD4.25 or later

## Note

# ZYXEL

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For more product information, visit us on the web at [www.zyxel.com](http://www.zyxel.com)

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Datasheet [ZyWALL 1100/310/110](#) and [USG20\(W\)-VPN](#)



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